Aligning Systems for Health Briefs: Methods Overview

Aligning Systems for Health research was conducted by the **MERLIN: Monitoring, Evaluation, Research, and Learning Innovations** team at the Population Health Innovation Lab (PHIL), a program of the Public Health Institute. Dr. Stephanie Bultema (sbultema@phi.org) and Sue Grinnell (sgrinnell@phi.org) served as Co-Principal Investigators on the project. Briefs are based on findings from PHIL's Aligning Systems for Health research and Dr. Bultema's dissertation, titled *Linking Collaboration Dynamics and Outcomes in Collaborative Governance*. The Aligning Systems for Health Briefs research team includes:

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Funding for this project has been made available through Aligning Systems for Health, led by the Georgia Health Policy Center with support from the Robert Wood Johnson Foundation.

Methods Summary

Research used a participatory approach and concurrent mixed methods to investigate the ways in which collaboration dynamics relate to outcomes in multisector collaboratives (MSCs). The study sample includes 22 health-focused MSCs (Accountable Communities of/for Health) in Washington and California and their participants. Primary data were collected with surveys, interviews, focus groups, and meeting observations from June 2020 through September 2021. Documents were collected for years 2015 through 2020 and secondary demographic data on the populations served by ACHs in the study sample were collected for years 2018 through 2020. Quantitative data were analyzed using structural equation modeling. Qualitative data were analyzed using theory-testing process tracing. Taken together, the multiple data sources used across a mid-sized sample of MSCs (n=22) and MSC participants (n=642) provided the evidence needed to explore linkages between collaboration dynamics and outcomes in MSCs.

Research Questions

1. How can elements of an MSC's local context and collaboration dynamics be combined, enhanced, or mitigated to increase the likelihood of achieving positive systems change, improved equity, and collaborative sustainability?
2. When do certain configurations work, for whom, why, and under what conditions?

Research Design

Participatory: Collaboration and engagement with MSC participants, funders, and policy makers.
Realist Lens: What works for who, when, where, and why?
Mixed Methods: Concurrent quantitative and qualitative data collection and analysis.

Conceptual Lenses

Integrative Framework for Collaborative Governance
Common Framework for Assessing Accountable Communities of/for Health (ACHs)
Framework for Aligning Sectors

Study Population

The full population of study includes 22 Accountable Communities of/for Health (ACHs) in Washington (n=9 ACHs, 383 participants) and California (n=13 ACHs, 259 participants). A purposive sample of 7 ACHs were selected for in-depth qualitative inquiry (WA n=5; CA n=2). Figures 1 and 2 show the geographic location and coverage of the 22 ACHs comprising the study population.

Figure 1. ACHs in Washington State

Figure 2. ACHs in California State

Data Collection

Data were collected under the Public Health Institute's IRB #I20-008. Primary and secondary data sources were used as evidence in this study. Primary data sources include surveys and interviews. Secondary data sources include meeting agendas and minutes, team governing documents (charters and bylaws), annual reports, evaluation reports, initiative websites, collaborative governance planning documents (theory of change, logic model, strategic plan, etc.), and publicly available datasets (American Community Survey, America's Health Rankings, County Health Rankings).

Interview and Focus Group Sample

Preliminary interviews were conducted with ACH staff to learn about individual communities, gain an improved understanding of how collaboration dynamics work in the ACH context, and to validate the importance of the focal outcomes of study (systems change, improved equity, collaborative sustainability). At least two staff from each of the 22 ACHs were invited to participate in a preliminary interview. ACH staff were sent up to two reminder emails if they were not responsive to the initial invitations. Preliminary interview recruitment resulted in 19 interviews conducted with 30 individuals representing 15 ACHs.

From the full study sample of 22 ACHs, a smaller, diverse sample of six ACHs were invited to participate in a deep dive.[1] When selecting ACH communities for the diverse sample, key variables of consideration included initiating leadership, geographic scale, funding levels, population density, average annual income, and percentage of the region's population that is uninsured. The selection of a heterogeneous sub-sample of ACH communities for in-depth inquiry was intended to optimize external validity of the study.[2] Participating deep dive ACHs were asked to refer a minimum of six individuals to participate in key informant interviews and focus groups, including one representative of each of the following groups: ACH backbone organization, tribal nations or other Native American / Alaska Native (NA/AN) communities, community residents, social services sector, public health sector, and health care sector. Table 1 provides an overview of group representation of the full interview and focus group sample.

Table 1. Demographics of Interview & Focus Group Sample

Group Representation	N	%
Tribal Nations / NA/AN Communities	3	4%
Community Representatives	3	4%
Behavioral Health	5	6%

[1] Seawright, J. W., & Gerring, J. (2008). Case selection techniques in case study research: A menu of qualitative and quantitative options. *Political Research Quarterly, 61*(2), 297. https://doi.org/10.1177/1065912907313077

[2] Singleton, R. A., & Straits, B. C. (2018). Sampling. In *Approaches to Social Research* (6th ed., pp. 149–184). Oxford University Press.

Public Health	7	8%
CGR Staff	40	47%
Health Care	13	15%
Social Services	14	16%
Total	**85**	**100%**

Survey Sample

Survey findings draw on 596 responses from individuals representing 20 ACHs. Individuals participated as community representatives (n=61), tribal representatives (n=11), organization representatives (n=431), and ACH staff (n=93). Survey results are more representative of Washington (n=345 respondents) than California (n=251 respondents). Response by ACH ranged from three to 88 respondents, with an average of 30 respondents per ACH. Survey response rate ranged from 20% to 47% across ACHs. Table 2 provides an overview of key demographic characteristics of the survey sample.

Table 2. Demographics of Survey Sample

Variable	N	%
Group Representation		
Tribal Nations / NA/AN Communities	11	2%
Community Representatives	61	10%
Behavioral Health	14	2%
Public Health	31	5%
CGR Staff	93	16%
Health Care	181	30%
Social Services	205	34%
Residential Setting		
Reservation	4	1%
Suburban	121	26%
Rural	163	36%
Urban	170	37%
Race		
Native Hawaiian/ Pacific Islander	4	1%
Other	17	4%
American Indian/ Alaska Native	23	5%
Asian	23	5%
Black/ African American	27	6%
White	366	80%
Ethnicity		
Spanish	4	1%
Hispanic	13	3%
Latina/Latino	23	5%
None	406	91%
Grand Total	**596**	**100%**

Document Sample

A purposive sample of documents was collected for all 22 ACHs and included all available group charters and bylaws, planning documents (logic models, strategic plans, theories of change), annual reports, and meeting agendas and minutes. Most documents were publicly available on ACH websites. Some documents were obtained through other

means, such as survey respondent document upload or research stakeholders sharing relevant documents during informal interactions. Documents were collected for all available years from 2014 through 2020. A total of 1,796 were collected across the 22 ACHs, with anywhere from six to 658 documents collected for a single ACH. On average, 82 documents were collected for each ACH. Documents were more readily available for Washington ACHs (average of 135 documents per ACH) than California ACHs (average of 45 documents per ACH).

Process Tracing Case Selection

For process tracing, a subset of typical cases was identified using survey data. A typical case is one where "the hypothesized cause, outcome, and contextual conditions are all present."[3] The hypothesized cause of ACH activities (i.e., initiation of the ACH) were present in all cases. Presence of contextual conditions and outcomes was determined using survey data. A sample of qualitative data were drawn from the full dissertation dataset and analyzed for the three ACHs with the highest levels of each outcome (systems change, equity, sustainability), based on survey response across 20 ACHs. Multiple cases were traced for each outcome so that cross-case comparisons could be made.

Data Analysis

Primary analytic techniques for hypothesis testing include:

1. Process tracing to explore how collaboration dynamics can act as causal mechanisms for achieving outcomes.[3]
2. Structural equation modeling (latent path analysis) to understand the relationships among observed variables, latent variables, and multiple dependent variables.[4]

[3] Beach, D., & Pedersen, R. B. (2019). *Process-Tracing Methods: Foundations and Guidelines* (2nd ed.). University of Michigan Press.
[4] Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling*, (4th ed.). The Guilford Press.